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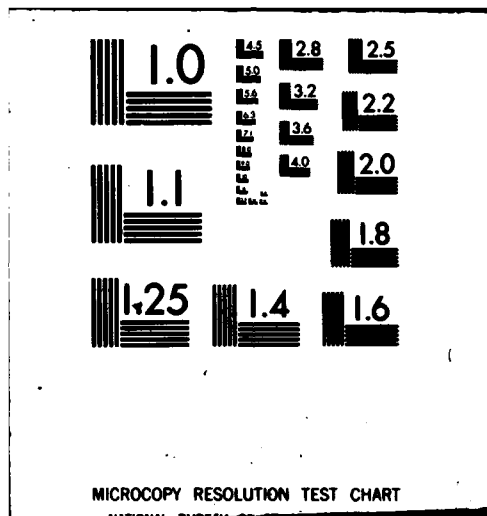
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Voluntary Separation For Attrition Management

Final Report

March 1979

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**VOLUNTARY SEPARATION
FOR
ATTRITION MANAGEMENT**

Final Report

**Prepared under Contract to
Navy Personnel Research and Development Center
San Diego, California 92152**

Contract No. N66001-78-C-0037

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ADVANCED RESEARCH RESOURCES ORGANIZATION

March 1979

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS
BEFORE COMPLETING FORM

1. REPORT NUMBER 6	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Voluntary Separation for Attrition Management		5. TYPE OF REPORT & PERIOD COVERED Final Report
7. AUTHOR(s) The Staff of the Advanced Research Resources Organization		6. PERFORMING ORG. REPORT NUMBER ARRO-3022-FR 1
10. PERFORMING ORGANIZATION NAME AND ADDRESS Advanced Research Resources Organization 4330 East-West Highway, Suite 900 Washington, D.C. 20014		8. CONTRACT OR GRANT NUMBER(s) N66001-78-C-0037
11. CONTROLLING OFFICE NAME AND ADDRESS Navy Personnel Research and Development Center San Diego, California 92152		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) 12 83		11. REPORT DATE March 1979
		12. NUMBER OF PAGES
		13. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

**10 Barry / Goodstadt
Alan / Romanczuk**

18. SUPPLEMENTARY NOTES

**Nancy / Yedlin
Jeffrey / Kane
Sextold / Levine**

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Attrition, Enlisted Attrition, Voluntary Release Pilot Program

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

An innovative program of attrition management through an early voluntary release option has been instituted on a trial basis for Navy enlisted personnel. An evaluation of the effectiveness of this program is required in order to assess whether or not attrition rates and attitude toward the Navy are affected. A comprehensive structured interview was conducted with 234 enlisted personnel who previously had been in the Voluntary Release Program or in a matched control group not having the option to leave. Comparisons → next page

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between groups were made in terms of propensity toward attrition and perceptions of Navy life. The propensity toward attrition was much lower for the voluntary release group than for the control. The voluntary release group also showed more favorable attitudes toward the Navy than did the group not having the option to leave the Navy. The reasons offered for intending to attrit differed markedly between groups. The Voluntary Release Pilot Program exerted a beneficial impact upon its participants in the middle and later stages of their first enlistment and merits further study as a means of effective attrition management.

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PREFACE

Substantial contributions to this research effort were made by a number of ARRO staff. Dr. Barry Goodstadt helped conceptualize the original work plans. Mr. Alan Romanczuk and Ms. Nancy Yedlin helped with the development of the interview protocol and supervised its administration. Dr. Jeffrey Kane had primary responsibility for the analysis and interpretation of the data. Dr. Jerrold Levine prepared several sections of the final report and helped to integrate other written inputs.

SUMMARY

Problem ..

An innovative program of attrition management through an early voluntary release option has been instituted on a trial basis for Navy enlisted personnel. An evaluation of the effectiveness of this program is required in order to assess whether or not attrition rates and attitude toward the Navy are affected.

Approach

A comprehensive structured interview was conducted with 234 enlisted personnel who previously had been in the Voluntary Release Program or in a matched control group not having the option to leave. Comparisons between groups were made in terms of propensity toward attrition and perceptions of Navy life.

Results

The propensity toward attrition was much lower for the voluntary release group than for the control. The voluntary release group also showed more favorable attitudes toward the Navy than did the group not having the option to leave the Navy. The reasons offered for intending to attrit differed markedly between groups.

Conclusion

The Voluntary Release Pilot Program exerts a beneficial impact upon its participants in the middle and later stages of their first enlistment.

Recommendation

The voluntary release concept merits further study as a means of effective attrition management.

INTRODUCTION

High first-term attrition among military personnel has emerged as a serious threat to the continued success of the All-Volunteer Force. This is a particular problem in the U.S. Navy, which, having long experienced relatively limited losses (27%) in a draft environment, is now confronted with Non-EAOS attrition rates in excess of 40%. Such losses impose considerable training, recruiting, and management costs upon the Navy. Reflecting the gravity of this situation, the Chief of Naval Personnel has seen fit to closely examine personnel losses and to make investments to develop constructive means for managing attrition.

An innovative approach to attrition management was recently undertaken on a pilot basis to test the effects of a voluntary separation policy on manpower effectiveness and on administrative costs of attrition. The voluntary separation concept was designed to "front-load" otherwise unavoidable attrition. The basic premise was that permitting individuals to leave of their own volition would expedite the attrition process, thereby reducing continuing investments and reducing organizational costs associated with separation processing. An "experimental" group of selected recruits who entered the Navy were given the option of voluntary separation during their first six months of service, and a "control" group of comparable recruits were not provided the voluntary separation option.

The Navy Personnel Research and Development Center (NPRDC) is evaluating this pilot program. Information concerning program participants' pre-service backgrounds, and performance and disciplinary records in the

Navy are being systematically examined in light of attrition outcomes at various stages of experience in the service. For participants separated under the provisions of the program, additional data on their perceptions of Navy life are being gathered via exit interviews and questionnaires to provide insights into the value of the program.

Under contract to NPRDC, the Advanced Research Resources Organization (ARRO) was asked to gather supplemental evaluative data through interviews with enlisted personnel who earlier participated in the pilot program (as experimental or control subjects) and who have stayed on in the Navy. The interview protocols developed reflected two general item domains-- items assessing participants' reactions to the voluntary separation program, and items reflecting the individual's experiences in and reactions to the Navy environment.

ARRO's effort had several objectives. First, by gathering evaluative reactions from participants concerning the program's operation, it would be possible to fine-tune and adjust program operations in the event a voluntary separation concept is extended on a broader scale (i.e., institutionalized on a Navy-wide basis).

A second objective was to evaluate the "long-range" impact of a voluntary separation option. Earlier studies (i.e., Lau & Landau, undated; Guthrie, Lakota, & Matlock, 1978) investigated the short-term impact of this program. Longer term effects on attitudes and attrition may not be identical to short-term effects.

A third objective of the present study was to examine the contribution of organizational, contextual, and experiential factors to attrition outcomes and intention to complete active duty commitments. As a result,

this study would enable NPRDC to investigate the general process of attrition as well as more specific determinants of attrition in the context of the voluntary release program.

Of principal interest in the present study was attrition behavior. Attrition at the middle and later stages of enlistment is the most costly since the Navy's investment in training and "breaking-in" costs accumulate with time. However, attrition is by nature a historical phenomenon--one can't study it directly until it has happened. Moreover, the question of whether having the option to be released early increases the attrition rate cannot be answered directly because there is no way of assessing what the voluntary attrition rate is among personnel without the option. Therefore, in order to study attrition "behavior" before it occurs and to compare it to control levels, a surrogate measure of such behavior is needed. Such a measure is provided by the self-reported intention to leave. Several studies both in Navy settings (e.g., Malone, 1967; Landau & Somer, 1978; Landau, Somer, & Lau, 1978) and elsewhere (e.g., see Price, 1977) have indicated that this intention or propensity to "attrit" is the best single predictor of attrition. A measure of this propensity was derived in the present study and served as the study's focal outcome variable. Analyses were then carried out to determine whether having the voluntary release option changed the levels and determinants of attrition behavior during the later stages of the term of enlistment.

OVERVIEW OF THE EARLY PILOT PROGRAM

The purposes of the pilot program were to assess the effects of a voluntary release option on the rates of attrition, disciplinary actions, and unauthorized absences/desertions among enlisted first-term personnel holding such an option. In addition, on-the-job performance ratings of personnel with the voluntary release option, and the impact of accepting for enlistment a sample of recruits who did not meet minimum recruiting standards (i.e., DELTAs) were to be evaluated. Since it was hypothesized that much enlisted personnel turbulence emanated from recruits assigned to general detail duties, a voluntary release option might serve to filter out potential problem personnel early in their enlistment term, when the Navy had a minimum investment in them.

All male USN nonprior service apprentices with January 1976 current enlisted dates (CEDs) (N = 1165) were designated as the experimental group; and all similar apprentices with February 1976 CEDs (N = 973) served as the control group. The experimental group included 382 recruits classified as DELTA; and the control group, 318. The two groups were composed almost exclusively of general detail-destined apprentices.

All subjects were administered the Recruit Background Questionnaire during the last week of recruit training. This was a noncognitive questionnaire designed to obtain demographic information. Following recruit training, all subjects reported for apprenticeship training, a program designed to prepare them for their fleet duties. During the last week of this training, experimental subjects only were told that they had been selected to participate in a program studying the effects of voluntary discharge from the Navy. Under this program, subjects could employ a

voluntary separation option to be separated immediately during the period between completion of apprenticeship training and completion of 181 days of total active duty. After that time, they could request voluntary separation by giving the Navy six months' notice.

Before subjects who exercised their voluntary release option were separated, they completed an Exit Interview and an Exit Questionnaire. The former requested the subject to give his main reason for leaving the Navy, and the latter, to rate various aspects of Navy life. In August 1976, COs of both experimental and control subjects were asked to rate their performance and to list all disciplinary actions noted.

Guthrie, Lakota, and Matlock (1978) reported the following preliminary results: At the end of 23 months, 73% of the experimental group had elected to leave the Navy, while 48% of the control group, which did not have the voluntary release mechanism, had been forced out of the Navy. The majority of those leaving the Navy voluntarily expressed dissatisfaction with Navy life. "Unmet expectations" and "limited job opportunities" were among the chief reasons for requesting discharge. Among men classified as DELTAs, 76 and 50 percent of the experimental and control groups, respectively, attrited.

The availability of a voluntary out option had strong positive effects on the performance of experimental subjects. Four times as many experimental group subjects as control group subjects received performance ratings of "outstanding" or "above average." Also, they had half as many unauthorized absences, and lower rates in other offenses. Because of the high loss rate experienced in the experimental group, it was concluded that a blanket voluntary release opportunity is not a feasible mechanism for controlling

and/or front-loading attrition for general detail enlisted personnel. However, a variety of other redeeming values suggested the importance of continued study of a voluntary release option.

METHOD

Development of the Interview Protocol

The interview protocol was developed to elicit evaluative reactions to the voluntary release program; to assess the impact of the voluntary separation option on the service member's intention to fulfill his enlistment contract and (his intention) to reenlist; and to examine more generally the contribution of organizational and experiential factors to attrition outcomes.

The protocol used for data collection was developed in two phases. Through discussions with NPRDC and a review of relevant prior research on military socialization, attrition, career motivation, and organizational effectiveness, project staff developed an open-ended interview protocol. This protocol was administered to a small sample of first-term enlisted personnel stationed at the Washington Navy Yard. The protocol explored service members' expectations of Navy life prior to enlistment and the subsequent fulfillment and disconfirmation of those expectations. Service members were asked to discuss their impressions of Navy life and to talk specifically about the experiences (including those that might have resulted in disciplinary actions) which had shaped their impressions. Respondents were asked for descriptions of their Navy jobs, their reasons for joining the Navy, and comparisons between Navy and civilian life. Questions which dealt with intentions to fulfill present enlistment obligations and reenlistment were also posed. The protocol included a number of questions regarding the respondents' knowledge and impressions of the voluntary release program. Finally, respondents were asked for their suggestions on how to improve Navy life.

Following the administration of the open-ended interview, it was determined that a more structured questionnaire would prove a more appropriate data collection instrument. The more structured instrument would allow for greater specificity of information from respondents, would enable more precise comparisons between the sample groups, and would be a more efficient way to collect data considering the sample size. The structured interview protocol was designed to elicit responses to a wide variety of facets of Navy life, as follows:

(1) Ratings of the strength of reasons for joining	27 Items
(2) Goodness of reasons for joining Navy in retrospect	27 Items
(3) Navy training	21 Items
(4) Job assignment	14 Items
(5) Relations with co-workers	9 Items
(6) Supervision	16 Items
(7) Command	7 Items
(8) Personal freedom	8 Items
(9) Living conditions and Navy environment	7 Items
(10) Comparison with civilian life	3 Items
(11) Voluntary Separation	23 Items
(12) Disciplinary action	10 Items
(13) General attitude toward Navy	7 Items

Specific questionnaire items were constructed from responses to the open-ended interviews and adapted from previous work conducted by NPRDC and ARRO researchers on relevant topics. A copy of the interview protocol appears in Appendix A.

Data Collection Procedure

Graduate-level psychology students were trained to act as interviewers for the study. In a two-day session held at Old Dominion University, interviewers were trained in interviewing, probing, and recording techniques using the study protocol. The interviews were conducted over a month long period on-site at the Norfolk Naval Station in facilities provided by officials at the station. The interviews were administered on an individual basis to respondents. Interviewers read the questionnaire items to the study participants and recorded their responses. Administration of the interview averaged 40 minutes in length.

Two hundred thirty-four enlisted Naval personnel served as subjects. The subjects were in their first term of enlistment and were members of the experimental or control groups of the Voluntary Release Program. Study participants included all personnel in those groups in port at the Norfolk Naval Station who were available for interview during the data collection period. Seventy-two of the subjects (31%) had a voluntary separation option earlier in their term of enlistment.

The completed interview protocols were scored by first carrying out a thematic content analysis and coding of the open-ended questions. The coded and edited protocols were then keypunched and the data were stored in disc files for analysis.

RESULTS

Several new variables had to be created from existing ones in order to operationalize important concepts. Central among these was the propensity to attrit, which was embodied in a variable called INTLEAVE. INTLEAVE was constructed as a three-level variable, the first level designating a low propensity to leave the Navy before completing one's enlistment, the second level designating an ambivalent propensity to leave, and the third level designating a high propensity to leave. The specific combinations of responses to existing items that were defined as constituting each of the three levels on this variable, as well as the construction specifications for all other created variables, appear in Appendix B.

Next, it was considered desirable to ascertain whether a more parsimonious set of scores could be derived from the numerous items in the sections dealing with reactions to one's present job, co-worker relations, supervision, command, personal freedom, living conditions and Navy environment, and general attitude toward the Navy. In addition, it was imperative to determine whether these items were actually tapping distinct domains of responses. These items were, therefore, subjected to a series of principal factor analyses using squared multiple correlations as initial communality estimates. For each solution, the maximum number of factors was rotated to the parsimax criterion such that no rotated factor's sum of squared loadings fell below 1.0. For each such solution, if any item failed to load appreciably (i.e., $>.40$) on any factor, the item was eliminated and the remaining items were refactored. This procedure resulted in a very clean factor structure after several iterations which both supported the distinctions of the original item

domains and permitted a parsimonious reduction in the number of scores needed to capture each domain's variance. The rotated loading matrix is shown in Table 1. Factor scores were computed for each of the seven factors for use in subsequent analyses.

The analysis of primary interest sought to discern whether the determinants of INTLEAVE differed between the VOLOUT and non-VOLOUT (hereafter called NONVOL) groups. The analysis to explore the question consisted of two stages. First, for each of the two groups separately, INTLEAVE was correlated with the seven factored variables and with all other variables that were not accounted for by the factors. Second, INTLEAVE was separately regressed for each of the two groups in a stepwise fashion against all of the variables with which it had exhibited significant zero-order correlations within each group. In the case of each group, this procedure resulted in the selection of two variables. The results of the regression of INTLEAVE on the two variables selected for each group are shown in Table 2.

Several aspects of the results of these regression analyses need to be explained. First, the meanings of the variables accounting for each group's INTLEAVE responses must be specified. For the VOLOUT group, the two independent variables may be explained as follows:

ESCRXE = the list of reasons why people might have joined the Navy, comprising the first two pages of the interview protocol, was divided into "attraction to the Navy" reasons and "escape from circumstances" reasons. This variable expressed the average extent to which "escape" reasons both had been influential in one's decision and had proven to be justified. A high value indicated that even the strongest of one's escape reasons had proven unjustified.

TABLE I

Rotated Factor Solution of Work and Social Condition Items

Variable	h^2	Factor I (Supervision)	Factor II (Individual Identity)	Factor III (Co-worker Relations)	Factor IV (Personal Freedom)	Factor V (Work Involvement)	Factor VI (Living Conditions)	Factor VII (Interpersonal Involvement)
Q29	.341					.504		
Q30	.590					.714		
Q31	.456					.505		
Q32	.374					.509		
Q35	.222		-.395					
Q38	.286			.441				
Q39	.225			.395				
Q40	.491			.496				.435
Q41	.484			.491				.452
Q42	.502			.636				
Q43	.464			.630				
Q46	.420			.442				
Q47	.634	.658				.376		
Q48	.481							.376
Q49	.642	.538						.599
Q50	.531							.539
Q51	.620	.671						.670
Q52	.538	.501						
Q53	.672	.665						.410
Q54	.570	.671						
Q55	.473	.585						
Q56	.743	.741						
Q57	.488	.592						
Q58	.577	.655						
Q64	.424		.556					
Q65	.544		.643					
Q69	.347		.455					
Q70	.296				-.481			
Q74	.453				.611			
Q75	.343				.446			
Q76	.399				.457			
Q78	.383						.403	
Q79	.400						.571	
Q80	.632						.789	
Q81	.309						.474	
Q117	.529		.621					
Q118	.643		.677		.353			

TABLE 2

Regression of INTLEAVE on the Two Stepwise-Selected
Variables in the VOLOUT and NONVOL Samples

VOLOUT Sample: N = 44 out of 72

<u>Variable</u>	<u>Partial Correlation</u>	<u>Regression Coefficient</u>	<u>Standard Error</u>	<u>T Statistic</u>	<u>Significance</u>
Constant		-.032	.454	-.070	.945
ESCRXE	.230	.107	.071	1.515	.138
A.OVER.E	.420	1.263	.426	2.965	.005

R = .482

Standard Error of Estimate = .761

R^2 = .232

\hat{P} = .466

F-test for significance of regression = 6.207, P_α = .004

NONVOL Sample: N = 154 out of 162

<u>Variable</u>	<u>Partial Correlation</u>	<u>Regression Coefficient</u>	<u>Standard Error</u>	<u>T Statistic</u>	<u>Significance</u>
Constant		2.094	.231	9.068	<.0001
Q119	.375	.185	.037	4.973	<.0001
NAVCIVI	-.209	-.214	.081	-2.623	.0096

R = .479

Standard Error of Estimate = .643

R^2 = .230

\hat{P} = .475

F-test for significance of regression = 22.520, P_α < .001

A. OVER E. = the average strength of attraction reasons relative to the average strength of escape reasons; a high value indicated escape reasons were stronger due to the way the response alternatives were scaled.

The two independent variables for the NONVOL group have the following definitions:

Q119 = general satisfaction with life in the Navy

NAVCIVI = the extent to which the Navy was perceived to offer more opportunity than civilian life.

Secondly, any time independent variables are selected from a large set of potential independent variables, and their regression weights are computed on the basis of a sample from the subject population, capitalization on chance and sampling error exert influences on the regression results. Moreover, in small to moderate sized samples, there is the problem of the artifactual inflation of multiple correlations due to the number of variables approaching the number of cases. These problems require steps to correct the R's for overestimation. The traditionally preferred procedure for obtaining a more accurate estimate of the population multiple correlation is cross-validation. However, the number of VOLOUT subjects who had complete observations on the two independent and the dependent variables was too small to subdivide further. It was therefore decided to rely on the recent findings reported by Claudy (1978), who showed that the proximity of an observed R to its population value varies in a systematic way as a function of sample size. He expressed this relationship in a correction formula for converting an observed R (corrected for shrinkage) to an estimate of the population R. The use of this correction formula, therefore, achieves the same end as cross-validation but without the risk of encountering the aberrant

results associated with very small validation and cross-validation groups. The resulting estimates are shown in Table 2 as the \hat{P} values.

The regression results suggest that completely different factors determine the intention to attrit in the two groups. This suggestion was strongly supported by the following analysis. Each group's scores on the other group's regression variate were computed. The resulting scores were then correlated with INTLEAVE within each group. The results, shown in Table 3, reveal that the determinants of INTLEAVE in one group have little to do with those of the other group. Even when the weighting of the other group's independent variables were assigned optimum weights through regression in the attempt to account for each group's INTLEAVE variance, the amounts of variance explained were similarly negligible.

In order to shed further light on the differences between the two groups in the determinants of their propensity to attrit, each group's regression variate score was correlated with the remaining variables in the study. Only four variables correlated significantly with the VOLOUT group's variate, as follows:

	Correlation with VOLOUT Regression Variate:
ATTEXPMN: Average extent to which attraction reasons for joining confirmed expectations	= .480 (p = .001)
Q28: Extent to which one works hard on the job	= .416 (p = .03)
Q111: Number of times court- martialed	= .336 (p = .02)
WORKINV: Factor score	= .311 (p = .033)

TABLE 3

Cross-Validities of Determinants of INTLEAVE

Correlation between scores on

NONVOL's regression variate and

INTLEAVE in the VOLOUT group = .059 ($p = .6413$, $N = 65$)

Correlation between scores on

VOLOUT's regression variate and

INTLEAVE in the NONVOL group = .104 ($p = .2554$, $N = 121$)

Regression of INTLEAVE against

NONVOL's independent variables in the

VOLOUT group: $R = .128$

$R^2 = .016$

F-test of regression = .513 ($p = .6014$, $N = 64$)

Regression of INTLEAVE against

VOLOUT's regression variate in the

NONVOL group: $R = .113$

$R^2 = .013$

F-test for regression = .760 ($p = .4702$, $N = 120$)

Many more variables correlated with the NONVOL group's variate. In order to determine those that constituted the most important independent sources of influence, all significantly correlating variables were entered into a stepwise multiple regression. This procedure ultimately selected four variables for inclusion. These four and their correlations with the regression variate are shown below:

<u>Independent Variable</u>	<u>Correlation with NONVOL Group's Regression Variate:</u>
ATTEXPMN: Average extent to which attraction reasons for joining confirmed expectations	= .339 ($p < .0001$)
LIVCONDS: Factor score	= .350 ($p < .0001$)
INDIDENT: Factor score	= .357 ($p < .0001$)
PERSFREE: Factor score	= .473 ($p < .0001$)

In a search for further insights into the distinctions between the two groups in their motives and responses to Navy life, the means of the two groups were compared on all variables in the study. Table 4 reports the variables on which significant differences were found.

All open-ended responses were content analyzed and the frequency of each thematic category compiled. The principal value of these types of items is in generating hypotheses and avenues of inquiry for future research. No further analyses of these items were carried out in the present study.

TABLE 4

VOLOUT Vs. NONVOL Group Differences

Item	Definition	VOLOUT		NONVOL		t-test (p<)
		Group Mean	Group Mean	Group Mean	Group Mean	
INTLEAVE	Propensity to attrit (1=low propensity...3=high propensity)	1.492	2.609			.0001
Q1C.1	Extent to which "...to serve your country" was a strong reason for joining (1=high...4=low)	2.639	2.975			.0113
Q1C.2	Extent to which "...to serve your country" still seems like a good reason for having joined (1=extremely good...4=not good)	2.286	2.676			.0095
Q1E.2	Extent to which "...to get training..." still seems like a good reason for having joined (1=extremely good...4=not good)	1.797	2.232			.0070
Q1F.2	Extent to which "...to see the world" still seems like a good reason for having joined (1=extremely good...4=not good)	2.100	2.439			.0212
Q1G.1	Extent to which "...a good chance for a career" was a strong reason for joining (1=high...4=low)	2.611	2.926			.0355
Q1J.2	Extent to which "...opportunity for exciting and interesting experiences" still seems like a good reason for having joined (1=extremely good...4=not good)	2.491	2.754			.0494
Q1K.2	Extent to which "...bored with civilian life" still seems like a good reason for having joined (1=extremely good...4=not good)	2.818	3.280			.0424
ATTREASN	Average strength of attraction reasons for joining the Navy (1=high...4=low)	2.258	2.442			.0367
ATTEXPAN	Average extent to which attraction reasons for joining still seems like good reasons for joining (1=extremely good...4=not good)	2.257	2.489			.0075

TABLE 4 (Continued)

VOLOUT Vs. NONVOL Group Differences

Item	Definition	VOLOUT		NONVOL		t-test (p<)
		Group Mean	Mean	Group Mean	Mean	
Q30	My work is important to me (1=strongly agree...6=strongly disagree)	1.931	2.438	2.438	2.438	.0097
Q31	The kinds of work I do in the Navy are challenging (1=strongly agree...6=strongly disagree)	2.611	3.457	3.457	3.457	.0007
WORKINV	Factor score (-∞=high work involvement...+∞=low work involvement)	-.184	.083	.083	.083	.0247
Q44	The morale in my division is high (1=strongly agree...6=strongly disagree)	3.662	4.210	4.210	4.210	.0369
Q47	I get along with my supervisor on the job (1=strongly agree...6=strongly disagree)	1.792	2.179	2.179	2.179	.0477
Q49	I get along with my supervisor personally (1=strongly agree...6=strongly disagree)	2.139	2.827	2.827	2.827	.0021
Q53	My supervisor makes it easy for those he or she supervises to take orders (1=strongly agree...6=strongly disagree)	2.458	3.012	3.012	3.012	.0209
Q63	Most officers believe that enlisted personnel cannot think for themselves (1=strongly agree...6=strongly disagree)	2.708	2.173	2.173	2.173	.0116
Q65	The Navy understands the problems of enlisted personnel (1=strongly agree...6=strongly disagree)	4.000	4.920	4.920	4.920	.0433
Q66	Most officers avoid getting involved with problems of enlisted personnel (1=strongly agree...6=strongly disagree)	3.208	2.714	2.714	2.714	.0192
Q67	My commanding officer would help me if I got in trouble with the civil authorities (1=strongly agree...6=strongly disagree)	2.611	3.174	3.174	3.174	.0177

TABLE 4 (Continued)

VOLOUT Vs. NONVOL Group Differences

Item	Definition	VOLOUT Group Mean	NONVOL Group Mean	t-test (p<)
Q70	As a person in the Navy, it is hard for me to meet civilians I would like to socialize with (1=strongly agree...6=strongly disagree)	3.472	2.395	.0001
Q72	I am bothered by the opinion civilians have of me as a military person (1=strongly agree...6=strongly disagree)	3.972	2.907	.0001
Q76	I have enough privacy in the Navy (1=strongly agree...6=strongly disagree)	4.528	5.037	.0139
PERSFREE	Factor score (-=high personal freedom...+=low personal freedom)	-.267	.121	.0007
Q85	More opportunities for you inside or outside the Navy? (1=inside; 2=equal, 3=outside)	2.486	2.703	.0362
Q86	In the Navy, are you financially better than, worse than, or about the same as you would be as a civilian? (1=better than; 2=same; 3=worse than)	2.314	2.574	.0159
Q117	In general, the Navy system of justice protects individual rights (1=strongly agree...6=strongly disagree)	3.579	4.156	.0171
Q118	The Navy is interested in you as a "person" rather than as a number (1=strongly agree...6=strongly disagree)	4.417	4.988	.0042
Q119	In general, how satisfied have you been with your life in the Navy (1=very satisfied...6=very dissatisfied)	3.486	4.459	.0001
Q120	Would you recommend service in the Navy to young civilians you know? (1=definitely...5=definitely not)	3.208	3.849	.0001
Q121	Intention to reenlist (1=definitely...5=definitely not)	4.181	4.673	.0001

DISCUSSION

The central finding of this study was that the propensity to attrit was differentially determined for subjects in the VOLOUT and NONVOL groups. For VOLOUT subjects, attrition intentions seemed to stem from the constructiveness of the reasons for joining. People in this group who had joined the Navy to fulfill a positive purpose such as to obtain training, to gain maturity, or even to see the world revealed a lower propensity to attrit than people who had joined to get away from unpleasant outside circumstances. In contrast, propensity to attrit in the NONVOL group stemmed from a more global dissatisfaction with the Navy and the feeling that there were more opportunities for fulfillment on the outside.

These outlooks seemed, in turn, to derive most importantly from factors that might spell the difference between participation and non-participation in the Voluntary Release Program. Specifically, the NONVOL group's perceptions seemed to derive from the feeling of a lack of control over one's fate--a loss of personal freedom and of individual identity, and subjection to unpleasant living conditions. Where there is no freedom to escape from one's current circumstances, the inevitable reaction is to feel that one is enduring them not by choice as the price for obtaining whatever benefits accrue to the situation, but rather by fiat. Hence, the feeling of powerlessness and inability to control one's fate which, when compared to the freedoms of civilian life, make civilian life seem to hold vastly more opportunity.

A completely different set of factors seems to underlie the direct determinants of propensity to attrit in the VOLOUT group. People in this

group who had joined the Navy for "escape" reasons and had come to realize, in many cases, that enlistment had not been the proper responses to their predicaments, seem dissatisfied with what they've gotten out of their Navy experience. In fact, it is likely that they weren't especially attracted to what the Navy had to offer in the first place and viewed the Navy more as a place in which to be sheltered from their problems in civilian life. One would therefore expect the lack of involvement in their Navy work and the rejection of the Navy's attractions that was found to underlie their propensity to attrit.

The difference in the motivational dynamics underlying the propensity to attrit in the two groups was dramatically confirmed by the attempt to explain each group's propensity by the variables selected as most explanatory for the other group. In both cases, the other group's variables were ineffective in explaining attrition propensity.

Further evidence that the Voluntary Release Program had a sustained impact at this stage of enlistment is provided by the tests of group differences on the variables included in the study. Most importantly, the propensity to attrit was significantly lower for the VOLOUT group than for the NONVOL group. This finding, and the relatively positive attitude toward the Navy that it implies, portended the other significant differences that were found between the groups. On each of the items for which significant differences between the groups were revealed (see Table 4) the VOLOUT group showed more favorableness toward the Navy. These items relate to a large portion of the range of issues covered by the interviews. This finding must therefore be viewed as compelling evidence of the salutary impact of the program.

It may, therefore, be concluded that the Voluntary Release Pilot Program seemed to produce effects upon its participants that distinguished them from non-participants at the middle and later stages of their first enlistments. Some caution is necessary in attributing these effects to the program, however. It is possible that if all NONVOL group members who would have left the Navy if they could have could be identified and eliminated from the NONVOL sample, the responses of the remaining members of this group would be indistinguishable from those of the VOLOUT group. This possibility nevertheless seems unlikely due to the strength and consistency of the differences between the groups.

Assuming that the effects identified were due to the program rather than to the incomparability of samples, it can be said that the program appears to exert a beneficial impact upon its participants. It seems to remove the feelings of lack of personal freedom and powerlessness associated with fixed-term enlistees. Whether this results in the more favorable attitudes toward the various facets of Navy life that were revealed, or whether only those with favorable attitudes forego the opportunity to attrit, cannot be determined from this study. This possibility should be investigated in more detail. However, even if the latter phenomenon is found to have a role in producing the more favorable attitudes, as seems likely from earlier research comparing the attitudes of attritees and non-attritees (e.g., Lau & Landau, undated; Guthrie, Lakota, & Matlock, 1978), it would not seem capable of accounting for the consistent differences in reactions to comparable living and working conditions.

Finally, the study revealed one possibility for fine-tuning the Voluntary Release Program to diminish the attrition rates among its

participants. It was revealed that the propensity to attrit in the VOLOUT group was associated with the extent to which one joined the Navy to escape circumstances in civilian life. It would appear feasible, through a program of vocational interest inventories, background checks, and pre-enlistment interviews, to screen out people seeking to enlist for such "escape" reasons. It is recommended that a study of this strategy be undertaken, along with a determination of which, if any, "attraction" reasons for joining are predictive of foregoing the release option.

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APPENDIX A
THE INTERVIEW PROTOCOL

INTRODUCTION

Hello, my name is _____. We are conducting a study to find out how conditions in the Navy affect an individual's feelings about remaining in the service.

I would like to talk with you about the experiences you have had in the Navy. There are no right or wrong answers to these questions. What is important is how you feel about each one. By getting ideas from a wide range of people in the Navy, we have a better picture of what is happening so that suggestions can be made to make the Navy a better place to live and work.

Your answers will be totally confidential. Your name will not be directly attached to the questionnaire.

PRIVACY ACT STATEMENT

Authority for solicitation of this information is 5 USC 301. Information obtained will be used to evaluate the impact various Navy policies, regulations, and procedures have on Navy personnel. Your opinions as expressed in this questionnaire will not be made a part of your permanent record, not be used for any administrative actions concerning you. Participation is voluntary and no adverse consequences will result from non-participation.

I. REASONS FOR JOINING/FULFILLMENT OF EXPECTATIONS

1. Let's begin by talking about why you joined the Navy. Then I'll read to you a list of reasons why some people enlist in the Navy. For each one, please tell me if it was one of the reasons why you joined--that is, was it a strong, moderate, or slight reason, or not a reason at all. You can use Line #1 on the response sheet to answer these.

SSN - - 1-9

	STRONG REASON	MODERATE REASON	SLIGHT REASON	NOT A REASON	AN EXTREMELY GOOD REASON	A PRETTY GOOD REASON	A SLIGHTLY GOOD REASON	NOT A GOOD REASON	
a. You wanted to obtain technical training.	1	2	3	4	1	2	3	4	10-11
b. You wanted to get away from your family.	1	2	3	4	1	2	3	4	12-13
c. You wanted to serve your country	1	2	3	4	1	2	3	4	14-15
d. You wanted to get away from your community . . .	1	2	3	4	1	2	3	4	16-17
e. You wanted to get training for a job that you could do as a civilian when you got out. . . .	1	2	3	4	1	2	3	4	18-19
f. The Navy would give you a chance to see the world.	1	2	3	4	1	2	3	4	20-21
g. The Navy would give you a good chance for a career	1	2	3	4	1	2	3	4	22-23
h. The Navy would make you more mature and self-reliant	1	2	3	4	1	2	3	4	24-25
i. The Navy would give you a chance to get away from unpleasant situations in the civilian world.	1	2	3	4	1	2	3	4	26-27
j. The Navy would give you the opportunity for exciting and interesting experiences	1	2	3	4	1	2	3	4	28-29
k. You were bored with civilian life.	1	2	3	4	1	2	3	4	30-31

Now I would like to find out if these still seem like good reasons to you for having joined--that is, did you get to do those things you joined the Navy to do? I'll read those items again that you said were a reason for joining. Using Line #2 on the response sheet, for each of these items please tell me if it still seems like a good reason for having joined--an extremely good reason, a pretty good reason, a slightly good reason, or not a good reason. For example, if you joined the Navy to see the world, but you haven't done any traveling, this may no longer seem like a good reason to you for having joined. Are you ready? **DO NOT READ STATEMENTS THAT RESPONDENT SAID WERE "NOT A REASON" FOR JOINING.**

2. Where there any other reasons why you joined the Navy?
IF YES: What were they?

		AN EXTREMELY GOOD REASON	A PRETTY GOOD REASON	A SLIGHTLY GOOD REASON	NOT A GOOD REASON	
		1	2	3	4	
a.	<input type="checkbox"/>	1	2	3	4	32-33
b.	<input type="checkbox"/>	1	2	3	4	34-35
c.	<input type="checkbox"/>	1	2	3	4	36-37
d.	<input type="checkbox"/>	1	2	3	4	38-39
e.	<input type="checkbox"/>	1	2	3	4	40-41

IF ENTRY IN #2: (For each of these reasons,) I would also like to know if it still seems to be a good reason for having joined. Again, referring to Line #2 on the response sheet, please tell me if it now seems to have been an extremely good reason, a pretty good reason, a slightly good reason, or not a good reason for having joined.

II. NAVY TRAINING

Now let's talk about training you may have received in the Navy.

3. Did you attend Navy A-School?

YES. 1 → **SKIP TO Q5**

42

NO 2

4. What was the main reason you didn't go to A-School?

GOT CREDIT FROM ANOTHER SERVICE. 1

DIDN'T WANT TO GO. 2

WAS NOT TOLD ABOUT IT. 3

DIDN'T HAVE HIGH ENOUGH TEST SCORES. 4

NOT RECOMMENDED BY COMMANDING OFFICER. 5

43

DID NOT WANT TO EXTEND ENLISTMENT. 6

CURRENTLY ON THE WAITING LIST. 7

OTHER. 8

→ SPECIFY:

_____ ☐

44

SKIP TO Q16

5. What was the rating you were supposed to get by attending this A-School?

--	--	--	--

45-48

6. How many weeks long was the complete course?

--	--

49-50

WEEKS

7. Did you graduate from A-School?

YES. 1 →

SKIP to Q10

51

NO 2

8. How many weeks of A-School did you complete?

WEEKS

52-53

9. What was the main reason why you did not graduate?

ACADEMIC PROBLEMS. 1

MEDICAL PROBLEMS 2

FAMILY OR PERSONAL PROBLEMS. 3

DISCIPLINARY PROBLEMS. 4

OTHER. 5

54

→ SPECIFY:

55

SKIP TO Q16

10. How satisfied were you with the A-School you attended? Please use the responses on Line #3 of the response sheet.

VS	MS	SS	SDS	MDS	SDS
1	2	3	4	5	6

56

Could you explain why you feel this way:

57-58

59-60

61-62

I am going to read you a series of statements about A-School. I'd like you to agree or disagree using Line #4 on your response sheet.

	STRONGLY AGREE	MODERATELY AGREE	SLIGHTLY AGREE	SLIGHTLY DISAGREE	MODERATELY DISAGREE	STRONGLY DISAGREE	
11. I did well in the A-School I attended.	1	2	3	4	5	6	63
12. I can see the relevance of my A-School to the job I am doing.	1	2	3	4	5	6	64
13. I could do my job as well even if I had never attended A-School.	1	2	3	4	5	6	65
14. My A-School prepared me for my job	1	2	3	4	5	6	66
15. My A-School prepared me for a civilian job if or when I leave the Navy.	1	2	3	4	5	6	67

16. Did you go through apprenticeship training?

YES. 1

NO 2 →

SKIP TO Q28

68

17. What type of apprentice training was it? Was it

seaman,. 1

fireman, or. 2

airman 3

69

18. Where did you receive this training? Was it in

Great Lakes, 1

San Diego, or. 2

Orlando. 3

70

19. How satisfied were you with your apprenticeship training? Please use Line #3 on your response sheet to answer this.

VS MS SS SDS MDS VDS
1 2 3 4 5 6

71

Could you explain why you feel this way:

--	--

72-73

--	--

74-75

--	--

76-77

I'm going to read some statements again and I'd like you to agree or disagree with them, using Line #4 on the response sheet.

	STRONGLY AGREE	MODERATELY AGREE	SLIGHTLY AGREE	SLIGHTLY DISAGREE	MODERATELY DISAGREE	STRONGLY DISAGREE	
20. I did well in my apprenticeship training.	1	2	3	4	5	6	78
21. I can see the relevance of my apprenticeship to the job I am doing.	1	2	3	4	5	6	79
22. I could do my job just as well even if I had never attended apprentice training.	1	2	3	4	5	6	80
23. My apprenticeship training helped prepare me for my Navy job.	1	2	3	4	5	6	81

III. JOB DESCRIPTION

Now let's discuss your job duties in the Navy.

24. What is your present rating?

--	--	--	--

82-85

or, NONRATED-- XXXX

25. What rating would you most like to be in, whether you qualify for it or not?

--	--	--	--

86-89

or, UNCERTAIN-- XXXX

SKIP TO Q27 IF Q24 = Q25

26. What are the possibilities of your getting this rating? Is it:

very possible. 1

somewhat possible. 2

slightly possible, or. 3

not possible at all. 4

90

27. What rating did you want most when you joined the Navy?

--	--	--	--

91-94

or, UNCERTAIN-- XXXX

Please agree or disagree with the following statements about your duties, referring to Line #4 again on your response sheet.

	STRONGLY AGREE	MODERATELY AGREE	SLIGHTLY AGREE	SLIGHTLY DISAGREE	MODERATELY DISAGREE	STRONGLY DISAGREE	
28. I work hard on the job.	1	2	3	4	5	6	95
29. If I do poor work, I feel bad about it.	1	2	3	4	5	6	96
30. My work is important to me.	1	2	3	4	5	6	97
31. The kinds of work I do in the Navy are challenging.	1	2	3	4	5	6	98
32. My Navy training will be useful to me in civilian life.	1	2	3	4	5	6	99
33. The training I have gotten in the Navy has little to do with my present Navy job.	1	2	3	4	5	6	100
34. The qualification requirements that the Navy sets for many jobs are higher than needed to get the work done.	1	2	3	4	5	6	101
35. Only a few people in the Navy are working in jobs that make full use of their abilities	1	2	3	4	5	6	102

Okay. Now this next question requires a different kind of answer.

36. Do you consider your Navy job as your "life's work," or would you rather be doing something else?

LIFE'S WORK. 1
SOMETHING ELSE 2
UNCERTAIN. 3

SKIP TO Q38

103

37. What would you rather be doing as your life's work?

☐ ☐ ☐

104-106

or, DK-- 999

Please agree or disagree with the following statements, using the choices on Line #4 of your response sheet again.

	STRONGLY AGREE	MODERATELY AGREE	SLIGHTLY AGREE	SLIGHTLY DISAGREE	MODERATELY DISAGREE	STRONGLY DISAGREE	
38. I get along with my shipmates on the job.	1	2	3	4	5	6	107
39. I get along with my shipmates away from the job and on liberty.	1	2	3	4	5	6	108
40. It is important to me to get along with my shipmates on the job	1	2	3	4	5	6	109
41. It is important to me to get along with my shipmates away from the job.	1	2	3	4	5	6	110
42. My shipmates are helpful when I have job-related problems.	1	2	3	4	5	6	111
43. My shipmates are helpful when I have personal problems	1	2	3	4	5	6	112
44. The morale in my division is high	1	2	3	4	5	6	113
45. Most of my shipmates want to make the Navy a career	1	2	3	4	5	6	114
46. My shipmates usually work hard at their jobs.	1	2	3	4	5	6	115

IV. SUPERVISION

The following questions refer to your immediate supervisor, the superior you have the most contact with in your job. Please agree or disagree with the following statements, again using the choices on Line #4 of the response sheet.

	STRONGLY AGREE	MODERATELY AGREE	SLIGHTLY AGREE	SLIGHTLY DISAGREE	MODERATELY DISAGREE	STRONGLY DISAGREE	
47. I get along with my supervisor on the job. . .	1	2	3	4	5	6	116
48. It is important to me to get along with my supervisor on the job.	1	2	3	4	5	6	117
49. I get along with my supervisor personally. . .	1	2	3	4	5	6	118
50. It is important to me to get along with my supervisor personally	1	2	3	4	5	6	119
51. It is easy for people in my work group to discuss work-related problems with our supervisor	1	2	3	4	5	6	120
52. It is easy for people in my work group to discuss personal problems with our supervisor	1	2	3	4	5	6	121
53. My supervisor makes it easy for those he or she supervises to take orders.	1	2	3	4	5	6	122
54. My supervisor does his or her job well	1	2	3	4	5	6	123
55. My supervisor encourages us to do our job our own way.	1	2	3	4	5	6	124
56. My supervisor pays attention to our suggestions.	1	2	3	4	5	6	125
57. Discipline is handed out fairly by my supervisor	1	2	3	4	5	6	126
58. When I do a good job, my supervisor notices my good work	1	2	3	4	5	6	127

59. You can use Line #5 on the response sheet to answer this next question. How often are you criticized on the job?

- ALWAYS. 1
- FREQUENTLY. 2
- SOMETIMES 3
- ALMOST NEVER. 4
- NEVER 5

128

60. When your supervisor criticizes people in your work group, is it usually done in public or in private?

- PUBLIC. 1
- PRIVATE 2
- BOTH EQUALLY. 3
- DOES NOT CRITICIZE PEOPLE . . . 4
- DON'T KNOW. 5

129

} → SKIP TO Q62

61. Is this criticism justified? Use Line #5 again on your response sheet to answer this.

- ALWAYS. 1
- FREQUENTLY. 2
- SOMETIMES 3
- ALMOST NEVER. 4
- NEVER 5

130

62. What is the pay grade of your immediate supervisor?

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131-132

V. COMMAND

Now we have a few statements about your Navy command. Please agree or disagree with them, again using Line #4 on your response sheet.

	STRONGLY AGREE	MODERATELY AGREE	SLIGHTLY AGREE	SLIGHTLY DISAGREE	MODERATELY DISAGREE	STRONGLY DISAGREE	
63. Most officers believe that enlisted personnel cannot think for themselves.	1	2	3	4	5	6	133
64. Communicating through the chain of command is an effective way to resolve problems.	1	2	3	4	5	6	134
65. The Navy understands the problems of enlisted personnel	1	2	3	4	5	6	135
66. Most officers avoid getting involved with problems of enlisted personnel.	1	2	3	4	5	6	136
67. My commanding officer would help me if I got into trouble with the civil authorities	1	2	3	4	5	6	137
68. My command knows how we feel about general conditions.	1	2	3	4	5	6	138
69. The command sees that people in my division get all the credit they deserve for a good job	1	2	3	4	5	6	139

VI. PERSONAL FREEDOM

Now I would like you to agree or disagree with these statements about Navy life. Please continue using Line #4 again on your response sheet.

	STRONGLY AGREE	MODERATELY AGREE	SLIGHTLY AGREE	SLIGHTLY DISAGREE	MODERATELY DISAGREE	STRONGLY DISAGREE	
70. As a person in the Navy, it is hard for me to meet civilians I would like to socialize with.	1	2	3	4	5	6	140
71. Problems at home are interfering with my life as a sailor.	1	2	3	4	5	6	141
72. I am bothered by the opinion civilians have of me as a military person	1	2	3	4	5	6	142
73. In the Navy, I have a lot more freedom than I had as a civilian.	1	2	3	4	5	6	143
74. I have enough freedom to do what I want when I am off duty.	1	2	3	4	5	6	144
75. I enjoy myself when I am off duty	1	2	3	4	5	6	145
76. I have enough privacy in the Navy	1	2	3	4	5	6	146
77. I dislike the Navy's custom of socially separating officers and enlisted personnel	1	2	3	4	5	6	147

VII. LIVING CONDITIONS AND NAVY ENVIRONMENT

Please use Line #3 on your response sheet to tell how satisfied you are with the following.

	VS	MS	SS	SDS	MDS	VDS	
78. How satisfied are you with your present duty station?	1	2	3	4	5	6	148
79. How satisfied are you with the physical conditions where you work?	1	2	3	4	5	6	149
80. How satisfied are you with your present living conditions?	1	2	3	4	5	6	150
81. How satisfied are you with the recreation and entertainment available to you?	1	2	3	4	5	6	151

82. Which type of station would you prefer--ship or shore?

☐ SHIP. 1
☐ SHORE 2

152

☐ IF SHIP: What type of ship?

(GIVE LETTERS)

153-156

☐ IF SHORE: Would that be in the U.S. or overseas?

U.S. 1
 OVERSEAS. 2
 DK OR NOT CARE. 3

157

83. Where do you presently live? Do you live:

☐ in the BEQ. 1
☐ on ship 2
☐ in Navy family housing, or. 3
☐ in off-base housing 4

158

☐ OTHER 5

☐ SPECIFY: _____

159

VIII. COMPARISON WITH CIVILIAN LIFE

84. If you were not currently in the Navy, what do you think you would be doing now? Would you:

- have a better job. 1
- have a worse job 2
- have a job you like about the same 3
- be in school 4
- be traveling 5
- be unemployed, or what?. 6
- DK 7
- OTHER. 8

160

→ SPECIFY: ☐

161

85. Do you feel that there are more opportunities for you inside the Navy, or more opportunities for you outside the Navy?

- MORE INSIDE. 1
- MORE OUTSIDE 2
- ABOUT THE SAME 3
- DK 4

162

86. In the Navy, are you financially better than, worse than, or about the same as you would be as a civilian? (IF ASKED, THIS INCLUDES BENEFITS)

- BETTER THAN 1
- ABOUT THE SAME. 2
- WORSE THAN. 3
- DON'T KNOW. 4

163

IX. VOLOUT

87. Have you ever heard anything about a Navy program that allows people to be discharged voluntarily before the end of their first enlistment?

YES. 1

164

NO 2 → **SKIP TO Q102**

88. Are you in the program; do you have the option of getting a voluntary discharge?

YES. 1

165

NO 2 → **SKIP TO Q102**

89. Does this program seem to be a good idea to you?

YES. 1

166

NO 2

DON'T KNOW 3

90. Do you think this program should be offered to everyone who joins the Navy?

YES. 1

167

NO 2

DON'T KNOW 3

91. When you were told that you were part of the Voluntary Release Pilot Program, did this change your view toward the Navy in any way?

YES. 1

168

NO 2 → **SKIP to Q93**

92. How did it change your view?

--	--

169-170

93. Have you ever submitted a request chit under the Voluntary Release Program to get out of the Navy?

YES. 1

171

NO 2 → **SKIP TO Q98**

94. How many times?

--	--

172-173

95. What is the status of the (most recent) chit? Is it:

withdrawn, or. 1

about to be withdrawn, or. . . 2

waiting to be executed 3 → **SKIP TO Q97**

174

96. Why (did you/will you) withdraw the request?

--	--

175-176

97. What made you submit the request chit? Please mention specific things that led up to the request.

--	--

177-178

--	--

179-180

--	--

181-182

SKIP TO Q109

98. Have you ever thought about submitting a request chit to get out?

YES. 1

NO 2 → SKIP TO Q109

183

99. How many times?

--	--

184-185

100. What made you think about getting out? Please mention specific things that led up to your thinking about getting out.

--	--

186-187

--	--

188-189

--	--

190-191

101. Why did you decide not to submit a request chit?

--	--

192-193

SKIP TO Q109

102. Does a program that allows you to get out of the Navy anytime you want seem like a good idea to you?

YES. 1

NO 2 → SKIP TO Q104

DK 3

194

103. Do you think this type of program should be offered to everyone who joins the Navy?

YES. 1
NO 2
DK 3

195

104. If you had the option of getting out now, would you take it?

YES. 1
NO 2
DK 3

196

Please explain.

☐☐

197-198

☐☐

199-200

☐☐

201-202

105. Have you ever thought strongly about going UA or getting out of the Navy some other way before your enlistment was up?

YES. 1
NO 2

SKIP TO Q109

203

106. How many times?

☐☐

204-205

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107. What led to your wanting to get out (the last time you thought strongly about it)? Please mention specific things that led up to it.

--	--

206-207

--	--

208-209

--	--

210-211

108. What stopped you from getting out?

--	--

212-213

X. DISCIPLINARY ACTION

109. How many times have you been placed on report?

214-215

IF "0," SKIP
TO Q114

110. (How many of these have/Did this) result(ed) in a captain's mast?

216-217

111. (How many of these have/Did this) result(ed) in a court-martial proceeding?

218-219

112. Speaking about the disciplinary actions that have been taken against you, how fair do you think your superiors have been in applying Navy rules? Please use Line #5 on your response sheet to answer this.

VF	MF	SF	SUF	MUF	VUF
1	2	3	4	5	6

220

113. What effect did this treatment have on your feelings about the Navy? Did it:

make you feel much worse about the Navy. 1
 make you feel a little worse about the Navy. 2
 have no effect 3
 make you feel a little better about the Navy 4
 or, make you feel much better about the Navy 5

221

114. Have you done anything recently for which disciplinary action of some sort will be taken against you?

YES. 1
 NO 2 →

SKIP TO Q117

222

115. How fairly have you been treated so far in this matter? Please use Line #5 on your response sheet to answer this.

VF	MF	SF	SUF	MUF	VUF
1	2	3	4	5	6

223

116. Do you expect to be given a full and fair hearing in this matter?

YES. 1

NO 2

DK 3

224

Why do you feel this way?

--	--

225-226

117. Please tell me whether you agree or disagree with the next two statements, using Line #4 on your response sheet to answer:
In general, the Navy system of justice protects individual rights.

SA MA SA SDA MDA SDA

1 2 3 4 5 6

227

118. The Navy is interested in you as a "person" rather than as just a "number."

SA MA SA SDA MDA SDA

1 2 3 4 5 6

228

119. Use Line #3 on the response sheet to answer the next question:
In general, how satisfied have you been with your life in the Navy?

VS MS SS SDS MDS SDS

1 2 3 4 5 6

229

120. Would you recommend service in the Navy to young civilians you know? Would you:

- definitely recommend it. 1
- probably recommend it. 2
- neither recommend nor discourage it. 3
- probably discourage it, or 4
- definitely discourage it 5

230

121. At the end of your first enlistment, do you:

- definitely plan to reenlist. 1
- think you will reenlist. 2
- not know, or plan to wait and see about
reenlisting. 3
- think you will not reenlist, or. 4
- definitely plan to not reenlist. 5

231

122. Can you tell me specific things you like most about the Navy?

☐☐

232-233

☐☐

234-235

☐☐

236-237

nothing-- 99

238-239

123. Can you tell me specific things you dislike about the Navy?

☐☐

240-241

☐☐

242-243

☐☐

244-245

nothing-- 99

246-247

124. Can you tell me specific things that could be done to improve the Navy?

--	--

248-249

--	--

250-251

--	--

252-253

APPENDIX B

SPECIFICATIONS OF VARIABLES DERIVED FOR THE ANALYSIS

INTLEAVE

1 = Low intention to leave =

Q87:NO+Q104:NO

or

Q88:YES+Q93:NO+Q98:NO

or

Q88:YES+Q93:NO+Q98:YES+Q101:(2-12)

or

Q88:YES+Q93:YES+Q95:1,2

or

Q88:NO+Q104:NO

2 = Ambivalent intention to leave = Q87:NO+Q104:DON'T KNOW

or

Q88:NO+Q104:DON'T KNOW

3 = High intention to leave =

Q87:NO+Q104:YES

or

Q88:NO+Q104:YES

or

Q88:YES+Q93:NO+Q98:YES+Q101:1

or

Q88:YES+Q93:YES+Q95:3

NAVCIV1 = Recoded version of Q85

1 = MORE INSIDE

2 = ABOUT THE SAME

3 = MORE OUTSIDE

MISSING = NO RESPONSE or DK

NAVCIV2 = Recoded version of Q86

1 = BETTER THAN

2 = ABOUT THE SAME

3 = WORSE THAN

MISSING = NO RESPONSE or DK

ATTRXE =

Average of the reason strength times expectation fulfillment products for the attraction reasons for joining the Navy (1a,c,e,f,g,h,j). This reflects the extent to which such reasons were both strong and fulfilled.*

ESCRXE =

Average of the reason strength times expectation fulfillment products for the escape reasons for joining the Navy (1b,d,i,k). This reflects the extent to which such reasons were both strong and fulfilled.*

RTG.P.A =

0 = Present rating not the same as rating supposed to get by attending A-School (Q24:Q5)

1 = Present rating is the same as rating supposed to get by attending A-School

RTG.P.MW =

0 = Present rating not the same as the rating the person would most like to be in

1 = Present rating is the same as the rating the person would most like to be in (Q24:Q25)

RTG.P.WJ =

0 = Present rating is not the same as the rating most wanted when the person joined the Navy

1 = Present rating is the same as the rating the person most wanted when he/she joined the Navy (Q24:Q27)

ATTREASN =

Average strength rating of the attraction reasons for joining the Navy* (Q1a,c,e,f,g,h,j)

ESCREAS =

Average strength rating of the escape reasons for joining the Navy* (Q1b,d,i,k)

ATTCOUNT =

The number of attraction reasons for joining the Navy that a person rated as a slight or stronger reason

ESCOUNT =

The number of escape reasons for joining the Navy that a person rated as a slight or stronger reason

ATTEXPMN =

The average fulfillment of expectations ratings on all attraction reasons for joining the Navy (Q1a,c,e,f,g,h,j; Q2a-c:3-6,10,11,13,14)

ESCEXP MN =

The average fulfillment of expectations ratings on all attraction reasons for joining the Navy (that were designated as reasons by the respondent) (Q1b,d,i,k;Q2a-c:1,2,7-9,12,15)

A.OVER.E =

Ratio of the average strength rating
of a person's attraction reasons to
the average strength rating of the
person's escape reasons

*The original scale was recoded as
follows:

1 = SLIGHT REASON
2 = MODERATE REASON
3 = STRONG REASON
MISSING = NOT A REASON

APPENDIX C

REVIEW OF LITERATURE

During the six years that have elapsed since the introduction of the All-Volunteer Force, the armed services have devoted considerable attention to the operational problems and costs associated with attracting and retaining sufficient numbers of qualified personnel (cf. Cooper, 1977, DOD Report on the All-Volunteer Force, 1978). Recent data, for example, indicate that nearly forty percent of entering recruits were discharged prior to the end of their obligated service on active duty. These high rates of loss are costly not only from the standpoint of unrewarded organizational investments in training, recruiting, and long-term impacts on veterans benefits (GAO, 1979); they also drive up accession requirements, forcing the services to compensate for losses through further increases in recruiting. In the face of a declining manpower pool, and without a reduction in accession requirements or a relaxation of physical standards, recruiting for the 1980's is likely to provide greater numbers of higher-attrition-risk personnel (i.e., lower quality personnel) which may further exacerbate the retention problem.

The services have attempted for some time to control the extent and/or the timing of attrition through the development of screening devices and marginal performer programs which allow unit commanders to grant early discharges to persons having difficulties adjusting to service life. It is evident, however, that such mechanisms by themselves are not sufficient for systematic and cost-effective management of personnel loss.

To provide policymakers with a more clear-cut understanding of the policy options potentially available for attrition management, a number of research projects have been undertaken by the military to examine the determinants of first-term attrition. Along with these research efforts have

been a series of papers (Goodstadt & Glickman, 1975; Kissler, in preparation) which have attempted to integrate and provide broad gauge perspectives concerning military attrition research. Work has also been undertaken to review civilian literature on personnel turnover (Hand, Griffeth, & Moberly, 1977) and to define its relevance for military attrition. Finally, a conference of attrition researchers was convened (Sinaiko, 1977a, 1977b) to stimulate interest in military attrition problems. The objective of this activity was to highlight methodological and conceptual concerns relating to the attrition phenomenon and to determine directions for future research.

The results of the above efforts have amply served to review and organize the research and to illuminate various causes and determinants of attrition which require investigation. Earlier integrative activities have been less successful, however, in terms of directly influencing policies designed to manage attrition. This, of course, is to be expected since the identification of causal determinants of problems does not necessarily define the best solutions which may be applied.

Given the gravity of attrition problems facing manpower planners, there is a need to more clearly focus state-of-the-art research knowledge on the development and analysis of attrition management strategies. The purpose of this paper is to review recent and ongoing research within the services that confronts these problems.

In the course of reviewing relevant research, it readily becomes apparent that a number of factors influence attrition. These factors include characteristics of discharged individuals and organizational policies and practices. Investigators have based their efforts on several

differing hypotheses regarding the nature and causes of attrition, including:

- The "cause" of attrition resides within the individual, his/her background and capabilities ^{1/}
- The "causes" of attrition lie in the nature of the organization, its policies, practices, and conditions
- The "causes" of attrition at different points in time are a function of different factors and conditions

Since the results and directions of these studies have implication for the development of attrition management policy, the present review is organized around these hypotheses.

Causes of Attrition Residing Within the Individual

Until quite recently, a prevalent hypothesis among military policy-makers was that individuals are discharged because they lack certain "qualities" or capabilities which permit them to adjust to military life and to be effective in their work. This view also suggests that increasing rates of attrition are due to an influx of "poor quality" individuals (e.g., mirrored by such indices as low test scores, lack of high school diploma) who have a higher likelihood of being discharged. This hypothesis served for some time as a guiding principle in attrition research (cf. Goodstadt & Glickman, 1975) and is still held in some circles. A part of the reason undoubtedly stems from the fact that such characteristics are easily measured, and personnel data banks afford rapid access to information on individual characteristics. In addition, research on individual

^{1/} In purely statistical terms, attrition is not actually "caused" by the individual's background and capabilities; rather background factors serve as moderator variables such that persons with different backgrounds may be seen to have varying experiences and varying success rates in military manpower systems.

characteristics linked to attrition was quite successful in early investigations of attrition, thereby leading to substantial and continuing work to identify the background correlates of premature loss.

A number of ongoing and recently completed investigations in the Army have focused on personnel characteristics related to attrition. These studies include the following:

- Autobiographical predictors of attrition. This work resulted in the development of a Military Application Profile, a 20-minute biographical questionnaire, scorable like a test, which correlates 0.45 with 180-day attrition in several large samples.
- Development of Job Reading Task Tests. This project focuses upon test content drawn from reading tasks in Army field and technical manuals. The tests can ultimately be used for either screening out persons who do not possess sufficient literacy skills for Army training and jobs or for identifying persons requiring remedial reading assistance.
- Development of a Literacy Indicator from the ASVAB. This effort has derived several measures of reading ability from the ASVAB which may ultimately be used for predicting individual attrition.
- Development of a Cost-Effective Test Compromise Detector. This investigation will serve to enhance the usefulness of the ASVAB through identification of persons who had unauthorized, prior access to ASVAB material.
- Survey of First Tour Soldiers in USAREUR. Results of this project indicate that education, proficiency, age and behavior in training were related to soldiers' failure to complete their tours while in Europe.
- Evaluation of Early Enlistment Failures under TDP. The objective of this study was to develop a profile of individuals who are selected for early separation under the Army's Trainee Discharge Program. Findings indicated that TDP discharges as compared with persons who successfully completed training could be characterized as having poorer school relations; as being more likely to have been unemployed; and as having had less supervisory responsibility, less job satisfaction, and a reduced sense of personal competence. The work served as a foundation for the Military Applicant Profile.
- Longitudinal Personnel Inventory. As part of the development of an accession cohort data bank, this project is examining the separation experience of various demographic groupings.

- Longitudinal research on soldier adaptation. Findings from this study indicate that attrition-prone individuals are those who have low scores on the AFQT, enlisted in the Army to stay out of trouble with the law, were unemployed prior to enlistment, were engaged or married upon entry, and have come from urban areas.

Taken together, the findings and directions of these studies suggest that there are a variety of individual characteristics and background factors linked to attrition. Depending upon the final results of these investigations, it might be hypothesized that some or all of the following individual and background factors have a relationship to attrition:

- Reading ability (both general and job-specific)
- Biographical information (high school experiences, self-image, work and disciplinary history)
- Education
- Age
- Behavior during training
- AFQT and ASVAB Scores
- Demographic characteristics (e.g., high school achievement, marital status, employment status at entry, urban/rural background)

Should ongoing research find evidence to support these hypothesized correlates of attrition, ^{2/} such findings would be clearly consistent with attrition research undertaken in other services.

For example, recent research in the Navy (Guthrie, Lakota, & Matlock, 1978) revealed that those sailors discharged prior to the end of their

^{2/} We have used the term "correlate" to more precisely indicate the nature of the hypothesized relationships between particular variables and attrition. While the factors outlined above may actually be causally linked to attrition, the nature of the research designs employed in these studies precludes strong statements regarding causality.

tour were likely:

- To be younger (aged 17 or 18)
- To have one or more dependents
- To be Caucasian (minorities received fewer discharges, but more less-than-honorable discharges)
- To be less well educated (those with 10 or less years of education had higher attrition rates)
- To be in the highest mental group category 3/

It should be noted that these findings are restricted to a cohort of entering recruits (January 1976) who participated in the Navy's voluntary separation experiment as members of either the experimental or control group. Because of the unique context in which this study took place, caution needs to be exercised in generalizing these findings to the Navy as a whole and to other services.

A number of other investigations are currently underway in the Navy which focus on screening and initial assignment issues. These efforts include:

- Screening/Selection -- This effort is designed to enhance odds-for-effectiveness screening predictions based upon years of schooling, mental group, age, number of dependents.
- CLASP (Classification and Assignment with Pride) -- This investigation is focused on developing an optimal job match for the individual using a computerized assignment model. Additional objectives of the effort are concerned with predicting attrition on the basis of deficiencies in the person-job match and on the basis of pre-assignment fleet time.

3/ This finding was unexpected. However, it may be that those persons with the highest ability were more likely to leave of their own volition (assuming that they were given the voluntary separation option).

Research in the Marine (Sims, 1977) suggests that using a profile based upon educational level, age at enlistment, and a composite of ASVAB items permits significant ($r^2 = .104$) prediction of attrition through the first fourteen months of service. In addition, Matthews (1977) recently found that a psychological battery (testing interests in military service), a nonverbal test of reasoning ability, race, education, and age at entry were significant correlates of attrition during Marine recruit training.

In the Air Force, attempts have recently been made (Guinn, Kantor, & Vitola, 1978) to develop an adaptability screening instrument using aptitudinal, biographic, and inventory information. Using a sample of more than 12,000 airmen, investigators found that the most economical composite device (i.e., economical in terms of minimum number of items) was able to account for 22% to 24% of the predicted variance in early attrition. A drawback of this composite device is that it screens out 11% of the population that would have successfully completed the first enlistment.

All in all, research on individual difference variables as correlates of attrition has evidenced a high degree of consistency across specific research efforts and even across services. In broad terms, these findings suggest that individual difference variables can account for approximately 10% to 25% of the variance in attrition (based upon predicting individual discharges).

Work on individual difference variables in attrition points to the notion that enlistees bring with them certain characteristics and behavior patterns that lead (directly or indirectly) to an early discharge. If this notion is correct, it would appear that existing

research on individual difference variables may be applied to manage attrition in two major ways:

- (1) Research findings and predictive tools may be used to influence accession policies, e.g., through the development of new or revised tests and/or altered entrance standards.
- (2) Predictive devices may be used for early identification of persons to be included in remediation programs. (Care, however, needs to be taken to control for the development of self-fulfilling prophecies which are likely to arise in conjunction with remediation programs.)

Both of these research uses assume that a viable approach to managing attrition may be based upon altering the nature and mix of enlisted personnel who enter the service (i.e., through screening and recruiting policies) or by changing the behavior of personnel who are evidencing problems (i.e., through remediation programs). While there are practical limits to the effectiveness of such policies in the face of a declining manpower supply and the given constraints in training technology, these two areas deserve further exploration in R&D activities.

Causes of Attrition Reside in Organizational Policy/Practice

Beginning in 1975, the R&D community began to place more emphasis upon research that might increase understanding of how organizational conditions influence attrition. In part, this avenue of research was initiated because of the conceptual and statistical limitations inherent in screening research. That is, research showed that only a limited proportion of the variance associated with attrition could be accounted for by individual difference variables. Questions stimulated as a result of the Conference on First Term Enlisted Attrition (Sinaiko, 1977b) also added impetus to research on organizational determinants of attrition (particularly in the Navy).

It should be recognized that research on the attrition impact of organizational policies and practices has been limited by (1) the lack of readily accessible data bases measuring organizational policy and practice variables; and (2) by limitations inherent in the developing discipline of organizational science (see Roberts & Hulin, 1978). As a result, the conceptualization of organizational variables relevant to attrition has had to develop from a near-zero starting point. ^{4/}

At the present time, a number of efforts have been completed or are currently underway in the Army which could be characterized as focusing on organizational determinants of early personnel loss:

Post-Training Enlisted Attrition. This project involved qualitative data gathering among late first tour enlisted personnel, their immediate supervisors, and unit commanders. Findings suggested that a variety of organizational conditions decrease the "attachment" of enlisted personnel, including:

- poor quality of personal lifestyle and living conditions
- lack of meaningfulness, variety, and control of work
- organizational climate characterized by inadequate feedback, inequity in rewards and punishments
- disconfirmation of early expectations concerning the quality of Army life and work

In addition, findings suggested that unit managers deal with problem personnel in different ways and that these differing strategies lead to varying EDP attrition rates. In general, members of the chain of command do not view discharges as a problem; early discharges are seen instead as a tool for

^{4/} There has been a significant body of research in the civilian sector devoted to defining organizational factors in turnover (e.g., Porter & Steers, 1973). Civilian turnover, however is actually a voluntary form of attrition, while military attrition may be viewed as consisting in part of voluntary attrition and in part of involuntary loss.

delimiting unit personnel problems and for maximizing unit effectiveness (i.e., unit commanders opt for fewer, more productive personnel).

Organizational Factors Influencing Attrition. The objective of this project is to examine a number of organizational climate factors and work-related factors that may be related to unit attrition within sixty battalions within CONUS. The data include unit record information, as well as surveys of enlisted personnel, officers, and NCOs.

Leadership Factors in Enlisted Attrition. This study is focused on the impact of leadership behaviors and leaders' characteristics upon attrition during Advanced Individual Training. This work will eventually impact on leadership training and assessment activities.

Role of MOS Mismatch in First Tour Attrition. The aim of this investigation is to ascertain the effect of an MOS mismatch on attrition of men and women. This study will provide information on one facet of the linkage between career progression policy and attrition.

Longitudinal Personnel Inventory. This effort will focus in part on the examination of career field and MOS data within a longitudinal accession cohort data base. MOS analyses from this data set will provide the potential to examine the linkage between occupational experiences and early separation.

Adjustment to First Full-Time Job. This study entails in-depth interviews with soldiers at various points in the first tour. The focus of data gathering is on expectations of enlisted personnel.

Longitudinal Research on Soldier Adaptation. As part of a multiyear longitudinal study, this investigation is focused on predicting losses from a cohort of personnel who enlisted in 1974. The data base includes information on pre-service expectations, leadership climate, peer relationships, motivation for enlistment, and satisfaction with the Army.

In addition to these studies, two studies are now underway with funding from the Office of the Secretary of Defense to examine differences in attrition among Army units. One effort entails secondary data analysis of cohort data files, using unit separation information as a means of compiling information on differences in unit attrition rates.

The second study involves a survey of company and battalion commanders whose units vary in attrition rates and in personnel quality.

In the aggregate, the findings and hypothesis-generating activities from these efforts point to a number of organizational factors which may be hypothesized to play a role in attrition, including:

- Working conditions (job meaningfulness, variety of work, control over work)
- Quality of lifestyle and living conditions
- Organizational climate (adequacy of feedback, equity in allocation of rewards and punishment, efficiency of organization)
- Disconfirmed expectations of military life
- Mismatch between training and job assignment
- Leader characteristics and behavior
- Command discretion in the use of discharges and other resources for coping with problem personnel

Investigations in the other services have focused on the variables outlined above as well as a number of organizational factors that have not as yet been evaluated in the Army. In general terms, the Navy and the Marines have focused their efforts on (1) carrying out descriptive studies of attrition-inducing organizational factors, and (2) conducting administrative experiments in which key policy and organizational factors are experimentally manipulated to develop new attrition management mechanisms. As of this writing, the Air Force appears to have undertaken only descriptive studies of organizational factors involved in attrition.

Several experiments and studies are now underway in the Navy. One major study, JOBS (Job Oriented Basic Skills), is directed at identifying

and preparing otherwise unprepared sailors for A-school. The project entails a policy experiment in which a number of parameters are varied: (1) whether individuals receive JOBS training immediately after recruit training or after fleet experience, (2) whether or not recruits receive JOBS training at all.

Several conditions will be established for all participants in the study. First, ASVAB score requirements for entering A-school will be waived. Second, participants in the JOBS study will be offered a contract for subsequent training, contingent upon acceptable levels of performance. The research will examine program as well as individual variables as predictors of attrition.

A second major experimental effort, the General Detail Study (GENDET), is directed at (1) examining the impact of alternative recruiting messages upon attrition of General Detail Sailors; (2) estimating the effects of alternate forms of apprenticeship training on losses; (3) determining the effects of alternate lengths of enlistment; and (4) examining the predictive power of biographic, performance, and exit data for understanding attrition in the context of GENDET interventions.

In addition to experimental work, the Navy has also funded descriptive research focused on organizational determinants of attrition. For example, in structured surveys of first-term separatees and non-separatees in the Navy and Marine Corps, Greenberg, Murphy, and McConegly (1977) found that separatees believed that a major cause of attrition was supervisory behavior (including harassment, frequent criticism, and favoritism), particularly among NCOs. Results of this investigation also indicated that regimentation and the lack of an effective means of expressing

complaints about supervisors also contributed to early discharges. Finally, family problems were seen as a significant cause of attrition.

Other descriptive studies in the Navy include a longitudinal effort currently being conducted by the Navy Personnel Research and Development Center (cf. Landau, Somer, & Lau, 1978). Because of the time-dependent nature of findings from this study, we have described it in the section, "Attrition at Different Points in Time is a Function of Different Factors and Conditions."

A recent longitudinal questionnaire study of recruit training in the Marine Corps (Mobley, Hand, Baker, & Meglino, 1977) also pointed to a number of organizational factors which appear to influence attrition. Separating recruits indicated that the major causes for their discharge included: missing family and friends, lack of personal freedom, pressure, and rules and regulations. Additional data on pre-training expectations indicated that compared to graduates, those persons who received discharges during training began training with lower expectations of completing their enlistments, were less attracted to a "Marine Corps role," expected less leadership structure, and expected to be less satisfied. It was also found that persons who were discharged felt that they had a better chance of finding an acceptable civilian job.

Following up these findings, Mobley et al. have extended their work in the Marines to encompass an administrative experiment (PIRATE) involving a realistic job preview. The aim of this experiment is to reduce the potential for unrealistic expectations among recruits and thereby limit the possibility of subsequent disappointment with, and withdrawal from, the organization.

Finally, descriptive research in the Air Force has yielded a picture of several organizational determinants of attrition. A 1975 study conducted by the Air Force Military Personnel Center of the Minimally Productive/Limited Potential Discharge Program (the Air Force's Marginal Performer Program) revealed that separatees believed that their discharges were caused by job dissatisfaction, supervision, regimentation, "hassles," and personal problems.

Existing research on the impact of organizational conditions on attrition suggests that there are two basic mechanisms through which such factors may operate. First, at the individual level, a number of studies indicate that persons who receive early discharges attribute their separation to conditions within the organization including the nature of supervision, the quality of working life and living conditions, and the lack of fit between pre-service expectations and subsequent military experience. These data suggest that a set of organizational and occupational conditions exists which has an adverse impact upon some enlisted personnel and ultimately leads to early discharge.

A second mechanism by which organizational forces may influence attrition appears to operate at the unit level. While less data have been gathered in this area, it is apparent from recent and ongoing research that (1) substantial differences in unit attrition rates exist, and that (2) unit commanders have a great deal of discretion in how they manage problem personnel and in whether or not they wish to utilize their discharge authority in individual cases.

Based upon the general directions evident in research on organizational determinants of attrition, it would appear that this work may be applied to manage attrition in (at least) three ways:

- (1) Findings may be applied to develop programs and policies for alleviating organizational and occupational conditions which have counterproductive effects upon enlisted personnel (e.g., reducing unmet expectations, restructuring jobs to make them more meaningful, elimination of MOS mismatch, etc.).
- (2) Findings may be utilized for developing line supervisory training programs to address concerns expressed by separatees regarding poor supervision.
- (3) Research may suggest programs and policies for managing attrition at the unit level through interventions directed at controlling the discharge authority available to unit commanders.

Research on organizational determinants of attrition has not, as yet, found its way into policy or programmatic applications such as those outlined above; yet it is clear that such applications are possible and would address those organizational conditions which appear to directly contribute to attrition.

Attrition at Different Points in Time is a Function of Different Factors and Conditions

The civilian literature on labor force participation and on personnel turnover suggests that young people undergo frequent job changes between the ages of 17 and 21. Much of this job-changing behavior is a consequence of career choice processes as young people attempt to obtain information about the world of work by "trying out" a variety of jobs. In addition, as young people mature and undergo personal changes (e.g., get married, obtain additional schooling), they more effectively define their occupational interests and career goals.

Recognizing that an individual's view of an organization may change as a result of experience and/or a consequence of personal change, a number of researchers have attempted to examine military attrition in

light of a larger career development context. These researchers view attrition as resulting from a dynamic interaction between the individual and the organization over a period of time. In such a framework, it is reasonable to hypothesize that attrition occurring at different points in time is caused by different factors. Investigators choosing to undertake research within this framework have had to rely upon time-series research methodologies (e.g., cross-sectional and longitudinal designs) which are sensitive to the time-dependent dynamics inherent in individual/organizational relationships.

A small number of attrition studies have been undertaken or are now in progress in the Army and in the other services predicated on the hypothesis that attrition is the result of interaction between individuals and military organizations over time. For example:

- Adjustment to First Full-Time Job. This effort is focused on personnel with either 1-3 months of service, six months of service, or within six months of the end of service. This cross-sectional design will permit an analysis of work expectations at various points during the first tour.
- Longitudinal Research on Soldier Adaptation. The longitudinal data base established in this project (Goodstadt, Frey, & Glickman, 1975) offers the potential to examine organizational and individual factors contributing to attrition at different stages of Army experience. Specific findings indicate that having a negative expectation of service life at entry is associated with attrition (Holz, 1975).
- Post-Training Enlisted Attrition. The results of this investigation suggest that enlisted personnel encounter a great deal of difficulty as they make the developmental transition from training to operational environments. These difficulties often bring on an early discharge (Goodstadt, Yedlin, & Romanczuk, 1978; Goodstadt & Nieva, 1978). In addition, findings indicate that persons undergoing discharge processing may be willing to complete their contracts in the reserves.

Findings from these efforts are quite limited at present; however, some of the findings reflect:

- The role of early expectations in subsequent attrition
- Critical time periods and early experiences influencing attrition
- Differential attrition trends associated with various personnel characteristics

A number of relevant investigations have been undertaken in the other services, including several longitudinal studies. The Navy, for example, is currently conducting a longitudinal study which involves a series of attitudinal assessments of an entering group of 4,900 first-term male and female personnel (Landau, Somer, & Lau, 1978). At this point in time, analyses have examined attrition only through the end of recruit training. The results indicate a number of differences between those who separated and those who remained through the end of Boot Camp; those who separated viewed civilian work environments as more attractive, experienced more expectancy disconfirmation concerning Boot Camp, and were more likely to expect the "real" Navy to be like a continuation of Boot Camp.

The Marine Corps undertook a longitudinal study recently to trace individual and organizational correlates of attrition (Mobley, Hand, Baker, & Meglino, 1977). Findings from this effort suggest that recruit-training separatees view the Marines as less attractive initially, expect less leadership structure, and expect to be less satisfied. Results are not yet available concerning the determinants of post-training attrition.

Research on time-dependent influences upon attrition has implications for the timing as well as the content of particular policies and management programs. Bearing in mind that only sketchy reports are currently

available concerning ongoing efforts, there appear to be three major ways in which this research can potentially be applied:

- (1) Research findings could be used to design programs and policies for developing coping skills among enlisted personnel at critical points in the tour (e.g., findings suggest that the first permanent duty assignment is one such critical period during the first tour).
- (2) Findings may suggest ways of using personnel more effectively so as to amortize early training and recruiting investments (e.g., findings suggest that EDP separatees might readily complete their contracts in the reserves).
- (3) Trend data encompassed in these studies may have implications for controlling the extent of attrition during training and post-training periods and the trade-offs inherent in early and late losses.

Conclusion

Based upon the research reviewed, several observations may be made regarding the direction and emphasis of recent attrition R&D in the services:

- (1) Research on screening devices has progressed to a stage where particular instruments (e.g., Military Applicant Profile) can be implemented for managing attrition in operational contexts.
- (2) Research on organizational determinants of attrition has largely been exploratory in nature. With the exception of policy experiments currently underway in the Navy and in the Marine Corps ^{5/}, work on organizational determinants of attrition has not as yet focused on the development and testing of specific mechanisms for managing attrition.

^{5/} These studies include administrative experiments designed to (1) test a voluntary separation policy in the Navy (Guthrie, Lakota, & Matlock, 1978); (2) evaluate programs to provide job oriented skills; (3) examine the impact of special programs directed at Navy General Detail personnel; and (4) evaluate the experimental use of job previews to provide Marine recruits with more accurate perceptions of service life.

- (3) A number of applications of existing research on organizational determinants of attrition are possible. These potential applications provide a basis for further R&D to design and evaluate attrition management strategies.

It is fairly evident that exploratory research in this area has made it possible to pinpoint a number of factors that are linked to or correlate with attrition. However, understanding the causes of attrition does not necessarily lead to a precise definition of policy and programmatic solutions. ^{6/}

Given the increasing concern of policymakers with attrition and its attendant fiscal and manpower costs, researchers do not now have the luxury of dwelling exclusively upon exploratory research to identify causal determinants. In light of the gravity of the attrition "problem," attrition research and development needs to move from a focus on the "causes" of attrition to greater emphasis on defining and evaluating attrition management remedies. In effect, we are recommending that state-of-the-art research on attrition should move in the direction of feasibility testing, demonstration projects, and policy experimentation activities in order to more clearly define policy and program options for attrition management.

^{6/} For example, recent research indicates that harassment and inequitable treatment of personnel is "cause" of early discharges. Several directions may be taken to remedy this condition (ranging from NCO training to the introduction of more responsive grievance mechanisms).

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